

March 20, 196

MM-12

Copy No. 28/3 of three.

Dear Jim:

SUBJECT: WE-1000

In my letter dated March 17, Serial A-6043R, I enumerated a number of changes proposed in Specification R-1803. Another change I overlooked which is incorporated in the proposed revision "E" is the change in basic frequency, Paragraph 1.1.2. This change has been discussed with Marty and meets with his approval.

Sincerely,

*BR*

Bob

25 YEAR RE-REVIEW

SECRET

# Westinghouse

## ELECTRIC CORPORATION



AIR ARM DIVISION

 PHONE: SOUTHFIELD 1-1000  
 FRIENDSHIP INT'L AIRPORT  
 BOX 746, BALTIMORE 3, MD.

March 17, 1961

 Special Project Office (LMBA-1)  
 Plans & Programs Office  
 Directorate of Production  
 Wright-Patterson AFB, Ohio

SUBJECT: Contract AF33(600)40280

- Enclosure: (1) - Five copies of Specification R-1803 Revision E,  
Radar Surveillance, High Resolution.
- (2) - Five copies of Specification R-1811 Revision A,  
Environmental Requirements for Developmental Radar

Dear Sir:

Enclosure (1) is proposed for incorporation in the contract  
in lieu of the original issue, Specification R-1803, as follows:

ReferenceDescription of Change

- 1.1.1 Gain was changed from 36 db to 32.8 db to reflect what  
is practical from the design of such a device. This is  
a practical limitation of an antenna design using corporate  
feed.
- 1.2.2.1 This paragraph was completely rewritten to reflect additional  
information available.
- 2.0 "be designed to" was added and -20 db was changed to -10 db.  
This change reflects the system performance which corresponds  
to the parameters stated, i.e. Power, Antenna Gain, Receiver  
Noise figure, Pulse Width, Range and Altitude. If performance  
in excess of -10 db is required, a change in Radar parameters  
is required.
- 4.2.3 Tolerance of +2 was changed to +20. The previous value was  
a typographical error.

SECRET

Special Project Office (LMBA-1)

-2-

March 17, 1961

ReferenceDescription of Change

- 5.0 "Instantaneous" control was deleted. Systems studies have indicated this is not required and was reported upon in Progress Report for 11/15/60 - 12/15/60 period.
- 6.0 This portion was deleted from this spec. and included as a separate Spec R-1811, Enclosure (2), to make it easier to conform to classification restrictions. What is left reflects known inputs to date.

Since the contract was negotiated a further review of the scheduling requirements has indicated the desirability of delaying delivery of certain items to allow the incorporation of the more complete information. It is felt that the proposed schedules for these items will not adversely affect the Program.

It would be desirable to delay the delivery of Item 3, Test Specification, approximately 6 weeks to 8/14/61. This would still provide 46 days for approval before tests begin on units and 75 days before composite tests are to commence. It is felt this is adequate time for such approvals.

Present schedule for Item 6, A Listing of Field Test Equipment, calls for delivery on 6/1/61 which is before the Test Specifications are completed. This would necessitate a listing of test equipment before the test philosophy is completed. It is, therefore, proposed that delivery of this list be postponed to 9/1/1961.

Your concurrence in these suggested changes is requested. If you have any questions on them please call me.

Very truly yours,

STAT

Interceptor PCS Project  
Air Arm Division - 251

SECRET

FORM AAE-50



**WESTIN**  
**AIR ARM DIVISION**

**BALTIMORE, MD., U. S. A.**

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## ENVIRONMENTAL REQUIREMENTS FOR DEVELOPMENTAL RADAR

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REV. ENTER	DATE	CHANGE ORDER NO.	PAGES AFFECTED	BY	APPROVED
REVISIONS					
ORIGINAL					
PREPARED BY <i>A. Haines</i>			CHECKED BY		
APPROVED			APPROVED		
APPROVED			APPROVED		
SHEET 1 OF 4 SHEETS			DATE 12-29-60	TOP OWG	SPEC. NO. R-1811

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PAGE	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99
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SPECIFICATION PAGE REVISION INDEX

FORM AAE-59

PAGE NO. 2

SPEC. NO. R-1811

REF A

FORM AAE-55

UNCLASSIFIEDENVIRONMENTAL REQUIREMENTS FOR DEVELOPMENTAL RADAR1. DESCRIPTION

This specification describes the environmental requirements of a developmental radar system.

2. ENVIRONMENTAL REQUIREMENTS

The equipment shall be designed to meet the service conditions (environmental) described in specification MIL-E-5400D(ASG) for class I equipment. During preproduction test, temperature, altitude, vibration, shock and explosion environmental tests shall be conducted according to specification MIL-E-5400D(ASG). Radio interference tests shall be conducted according to specification MIL-I-6181B.

3. GENERAL SPECIFICATION

The design and manufacture of this system shall conform to MIL-E-5400D(ASG), class I including amendment-1 except for the following exceptions, or additions.

3.1 Paragraph 3.1.1.2, Approval of Nonstandard Parts and Materials

The contract for this electronic equipment shall fall into category II with the exception that nonstandard parts and materials as defined in Paragraph 3.1.1.1 may be used by the contractor without approval by the procuring activity.

3.2 Paragraph 3.1.14.3 Stability of "Q" of Inductors

Coils need not be tested in the saturated sodium chloride solution as specified although the requirement shall be followed as a design goal.

3.3 Paragraph 3.1.18 Magnesium Alloys

The 50-hours salt spray test shall not be required.

3.4 Paragraph 3.1.19.5 Reference Designation for External Equipment Connectors

A block numbering system in accordance with MIL-STD-16 shall be acceptable.

3.5 Paragraph 3.1.30 Transformers and Inductors

The first sentence: "All audio and power transformers and inductors shall be



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SHEET 3

SPEC.  
NO. R-1811REV.  
A

UNCLASSIFIED



FORM AAE-55

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subject to approval by the procuring activity" shall not apply.

3.6 Paragraph 3.1.31 page 26 Tubes (electron)

Specification MIL-E-4682 shall be used as a guide but no approval shall be required by the procuring activity.

3.7 Paragraph 3.2.21.2 Altitude

Maximum required altitude shall be equivalent to an air pressure of 4.8 psia.

3.8 Paragraph 3.2.21.6.1 Shock Equipment

The shock amplitude shall be 10 g instead of 15 g.

3.9 Paragraph 3.2.21.6.2 Shock-Crash Safety

Not required.

3.10 Life

The equipment and all components shall have an operating life of 1000 hrs, and a shelf life of 1 year unless specifically waived. The equipment shall operate without adjustment for a minimum period of 12 hours which period shall include three complete ON-OFF cycles.

3.11 In the event of conflict between this document and any MIL specifications mentioned herein, this document shall govern.



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SHEET 4

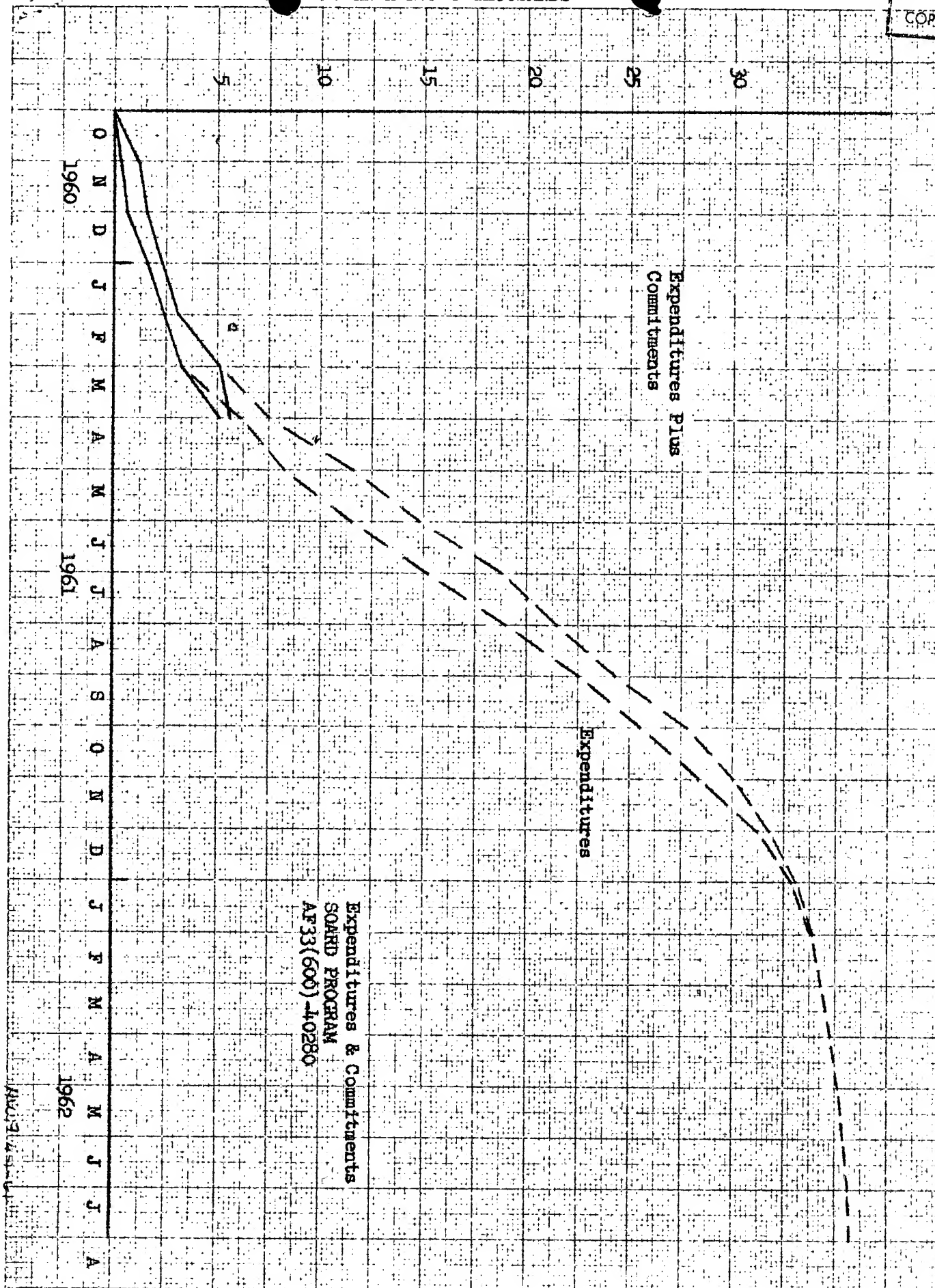
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